DMITRIYEV, P. T.

PA 233T45

USSR/Metallurgy - Welding, Copper Aug 52

"Electric Arc Welding of Copper Using a Copper Electrode With Quality Coating," P.T. Dmitriyev, N. M. Stepanov-Grebennikov, N. I. Makeyev, Engineers

"Avtogen Delo" No 8, pp 1-4

Reviews existing methods of copper joining, finding them unsatisfactory, and suggests new method developed by group of workers of a machine-building plant after experimenting for 1 1/2 yrs. Method is based on using copper electrode with special coating, named "Komsomolets-100," consisting of following

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components: ferromanganese, silicon copper, fluorspar, feldspar, and water glass. Discusses results of testing new electrodes.

233T45

DMITRIEV, P. T.

USSR/ Engineering-Welding

Card : 1/1

Authors : Kazennov, Yu. I., Cand. of Tech Sciences; Krutikov, A. N., Engineer; Kolosova, L. P., and Dmitriev, P. T.

Title : Ways of increasing production in manual arc-welding of acid-resistant steels type 18-8

Periodical : Vest. Mash. 34/5, 74 - 77, May 1954

Abstract : For the purpose of speeding up production researches were conducted in the arc-welding of steel, with 3-phase current of increased amount, using multiple electrodes. The larger flow of current increases the amount of melted material and speeds up the welding process. Each step is explained and formulas are given. It was found that the multiple-arc method increased the production by 50%. Seven Russian references, latest 1951. Tables; graphs.

Institution : ....

Submitted : ....

Withdrawn B-83422

DMITRIYEV, P. T. (Engr)

"Automation of Welding Thin-Walled, small-Diameter, IKh18N9T-steel Tubes Under Assembly Conditions."

paper presented at All-Union Scientific-Technical Conference on Welding in Shielding Gases, Leningrad, Dec 1957.

(Svarochnoye Proizvodstvo, 1958, No. 4, pp 46-48 -author Tyul'kov, M. D.)

DMITRIYEV, P.T.

NIKOLAYEV, V.B., inzh.; DMITRIYEV, P.T., inzh.; KAZENNOV, Yu.I., kand. tekhn.nauk; KHARCHENKO, A.B., inzh.

Welding the working channels of the reactor at the first atomic power plant. Svar.proizv.no.11:42-46 N '57 (MIRA 10:12)
(Nuclear reactors--Welding)

DMITRIYEV, P. T.

AUTHOR: Dmitriyev, P.T., Engineer

135-58-5-8/17

TITLE: Progressive Welding Methods in Chemical Machine Building (Progressivnyye metody svarki v khimicheskom mashinostroyenii)

PERIODICAL: Svarochnoye Proizvodstvo, 1958, Nr 5, pp 22-27 (USSR)

ABSTRACT: This is a general review of new welding methods and devices used at USSR plants producing equipment for the chemical industry. The Plant imeni Frunze uses the welding pistol "A-187" (Fig. 2) for welding pins to "Kh18N12M2T"-steel strip of 3.5 mm thickness which is used for manufacturing spiral heat exchangers. A method of chamfering pipe edges for argon-arc welding with non-fusing electrode (Fig. 3), and the macrostructure of the root of a seam welded on a pipe with an argon stream kept on the inside in the process of welding. Installation "ARK-1" (Fig. 4) for argon-arc welding of steel "18-8". Device for welding non-turnable pipes (Fig. 5). Semi-automatic device "PKh-624" (Fig. 6) for roller-welding thin-wall pipes to pipe grids, designed at the Experimental Plant of Chemical Machine-Building (by V.V. Yevgrafov). Welding wire for high-purity aluminum ("A00", "AV2", AV1") of same composition as the base metal but with an addition of 0.15 to 0.3% titanium

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(suggested by A.N. Krutikov and V.A. Savchenkov), reducing the tendency to hot cracks and improving corrosion resistance in highly-corrosive mediums like boiling highly-concentrated nitric acid. Automatic "AGN-8-26" (Fig. 7) developed by NIIKhIMMASh jointly with EZKhM, for argon-arc welding of non-turnable thin-walled "1Kh18N9T"-steel pipes of 8-26 mm diameter and 1-1.5 mm wall thickness spaced not less than 52 mm. Semi-automatic "AGTR-1" (designed by V.M. Nikolayev)(Fig. 8) for welding "1Kh18N9T"-steel pipes of 18 mm diamter and 0.3 mm wall thickness to pipe grid of same steel with non-fusing electrode in argon stream. Hinged automatics "ASSh-1" and "ASSh-2" for trimming edges of bottoms on special turning devices (Fig. 9). The use of common sand (suggested by G.A. Ukolov (deceased), V.N. Chernov, and N.N. Korf) instead of iron powder and special fluxes for oxygen-cutting of chrome-nickel and two-layer steel of 4-100 mm thickness, has proved satisfactory and has eliminated the less efficient method of arc-cutting stainless steel with low-carbon electrodes which required subsequent machining of the cut surface. The following persons are mentioned in connection with innovations: B.A. Ivanov and G.G. Pocheptsova (Khar'kov NIIKhIMMASh) in connection with, respectively, flux "KhNK-66"

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410520009-0"

Progressive Welding Methods in Chemical Machine Building 135-58-5-8/17

welding acid-resistant steel, and welding wire "1Kh18N9TYu", and Yu.I. Kazennov (NIIKhIMMASh) in connection with new welding technology.
There are 9 figures.

ASSOCIATION: NIIKhIMMASh

AVAILABLE: Library of Congress

Card 3/3

AUTHOR: Dmitriyev, P.T., Engineer SOV-135-58-9-2/20

TITLE: Prospective Development of Welding in Machine-Building for the Chemical Industry (Perspektivy razvitiya svarki v khimicheskom mashinostroyenii)

PERIODICAL: Svarochnoye proizvodstvo, 1958, Nr 9, pp 1-6 (USSR)

ABSTRACT: In connection with the prospective development of the chemical industry and the production of synthetic materials, general information is presented on new materials and advanced welding technology, including new steel grades, methods to extend the service life of machines, mechanization and automation of the welding process, production of forged-welded and stamped-welded machine parts, fusing with hard alloys and normalization of the welding process. Illustrated examples are given of stamped (forged and welded) machine parts, such as: fork with with elongated shaft, cantilever bracket, piston rod, cylinder for vulcanization autoclaves; reaction tower; high pressure vessel; crankshaft; large diameter flanges. There are 1 graph, 1 table, 1 photo and 10 diagrams

ASSOCIATION: NIIKHIMMASH

1. Chemical industry 2. Machines--Development 3. Welding --Applications

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80771

18.7200 S/137/60/000/02/06/010

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No 2, p 169 # 3246

AUTHORS: Dmitriyev, P.T., Nikolayev, V.M.

TITLE: Welding of Thin-Walled Small-Diameter 1X18H9T (1Kh18N9T) Steel Pipes

PERIODICAL: Tr. Vses. n.-i. i konstrukt. in-t khim. mashinostr., 1958, No 26, pp 21 - 33

TEXT: Information is given on the AГH-8-26) (AGN-8-26) automatic machine for welding in a fixed position thin-walled 1Kh18N9T pipes with non-fusing electrode in Ar atmosphere. Specially cut rings are used as welding material; they are manufactured either of 1Kh18N9T or 1Kh18N9TT steel depending on the operational conditions of the installation. BT-15 (VT-15) type W-rods are used as welding electrodes; their diameter is 2 - 3 mm; Ar of I or II composition is used as shielding gas. Information is given on the technology of welding pipes of 1 - 1.5 mm wall thickness. It was established that the weld joints possessed high strength, vacuum density and were not prone to crystallite corrosion. A special AГTP-1 (AGTR-1) welding head was designed

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Welding of Thin-Walled Small-Diameter 1X18H9T (1Kh18N9T) Steel Pipes

and manufactured for the mechanized welding of pipes with an external diameter of 18 mm and 0.3-mm wall thickness onto pipe framework. 1Kh18N9T steel was used as the pipe and framework material. Welding was carried out with non-fusing electrode in Ar atmosphere. The welding head is portable and it is mounted with the support on the pipe framework into the aperture of the pipe to be welded. Ar of II composition was used as shielding gas. During the tests of the weld joints the pipes collapsed in the base metal at 210 atm. The aforementioned pipes may also be welded onto the pipe framework by roller welding, by burnishing the internal surface of the pipes with the welding roller. For this purpose, a ПХ-624 (PKh-624) device was designed which is attached to the tool-holder of the roller welding machine equipped with an ignitron contact breaker.

I.A.

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S/184/60/000/004/016/021
A109/A021

AUTHOR: Dmitriyev, P.T., Graduate Engineer

TITLE: All-Union Conference on Corrosion-Resistance of Stainless Steel Welded Joints

PERIODICAL: Khimicheskoye Mashinostroyeniye, 1960, No. 4, pp. 47 - 48

TEXT: On December 9 and 10, 1959, the NIIKhIMMASh in compliance with a resolution passed by the Sovet po koordinatsii nauchno-issledovatel'skikh rabot po svarke (Council for the Coordination of Scientific Research on Welding) convened an All-Union Conference which was attended by 240 delegates. The following papers were read: "Corrosion Resistance of 18-8 Type Steel Welded Joints" by P.T. Dmitriyev, F.F. Khimushin and Z.F. Istrina of the NIIKhIMMASh; "Corrosion Resistance of 1Kh18N9T (1Kh18N9T) Steel Welded Joints in Nitric Acid" by B.I. Medovar and N.A. Langer of the Institut elektrosvarki im. Ye.O. Patona (Electric Welding Institute imeni Ye.O. Paton); "New Potentiostatic Method of Determination of Intercrystallite Corrosion of Stainless Steel Welded Joints" by V.K. Zhuravlev, M.M. Kurtepov and M.N. Fokin of IFKh AN SSR (IFKh of AS USSR); "Corrosion of Stainless Steel Joints in Nitric Acid Obtained by Argon Arc Weld-

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All-Union Conference on Corrosion-Resistance of Stainless Steel Welded Joints

ing" by A.S. Gryaznova and M.M. Kurtepov of IFKh AS USSR; "Increased Corrosion Resistance of 1Kh18N9T and X18H12M2T (Kh18N12M2T) Steel Joints Obtained by Automatic Argon Arc Welding" by A.I. Akulov and V.V. Spitsin of the MVTU im. Baumana (MVTU imeni Bauman); "Results of Tests on Electrodes Used for Field Welding of 1Kh18N9T Steel Pipes Operating in Nitric Acid" by P.T. Dmitriyev and V.N. Dyatlova of the NIIKhIMMASh; "Increased Resistance of 1Kh18N9T Stainless Steel and Intercrystallite Corrosion" by G.G. Pocheptsova of UKRNIIKhIMMASh; "Resistance of Kh18N12M2T and X21H5T (Kh21N5T) Welded Steels in Some Operation Media" by V.K. Cherkasov and K.K. Polyakova of the Irkutskiy filial NIIKhIMMASh (Irkutsk Department of the NIIKhIMMASh); "Corrosion Resistance of 1X14H14B2M (1Kh14N14V2M) Steel Welded With HCT-3 (NST-3) and ЦТ-1 (TsT-1) Electrodes" by I.N. Laguntsov and T.A. Mikhaylova of the Vsesoyuznyy teplotekhnicheskiy institut (All-Union Institute of Heat Engineering); "Weldability of X17T (Kh17T) and X17H2 (Kh17N2) Steels" by I.G. Volikova, A.N. Krutikov and A.P. Akshentseva of the NIIKhIMMASh; "On Tests Regarding Selection of Welding Methods for 1Kh18N9T and Kh18N12M2T Steels Used in Maleic Anhydride Production" by G.I. Gerasimenko, P.T. Dmitriyev, Ye.K. Revazov and Yu.I. Sorokin of the NIIKhIMMASh and NIOPIK; "Corrosion Resistance of 1Kh18N9T Welded Steel Used in Refineries of Sulfur-Con-

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taining Oils From the Eastern Part of the USSR" by S.V. Yunger, B.I. Medovar and N.A. Langer of the SNIITMASh and the Electric Welding Institute imeni Ye.O. Paton; "Use of Welding Machines in the Industry of Sulfuric Acid, Hydrosulfite, Fluosilicic Acid and Mineral Fertilizers" by B.I. Levi of NIUIF; "Reasons for the Low Intercrystallite Corrosion Resistance of 1Kh18N9T Welded Steel and methods of Improvement" by I.A. Levin and V.A. Nikiforov of the Giproneftemash; "Radiographic Inspection of Distribution of Niobium in Welded Stainless Steel Joints" by L.P. Bakhrakh and L.S. Livshits of the VNIIST; "Physical Control Methods of Intercrystallite Corrosion of Stainless Steels" by N.V. Khimchenko of the NIIKhIMMASh; "Corrosion Resistance of 1Kh18N9T Steel Arc Welded Pipes in Corrosive Media" by M.M. Kristal' of the NIIKhIMMASh; "Results of 5,000-h Tests on 1Kh18N9T, Kh18N12M2T and X18H12M3T (Kh18N12M3T) Welded Steels in Haloid Solutions" by G.L. Shvarts, A.N. Krutikova and A.P. Akshentseva of the NIIKhIMMASh; "Possibility of Unification of Various Types of Non-Settled Electrodes" by I.M. Vagapov of the Moskovskiy opytno-svarochnyy zavod (Moscow Experimental Welding Plant). The following shortcomings in welding production were pointed out: industrial production of low-carbon stainless steels and electrodes containing 0.03% of car-

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All-Union Conference on Corrosion-Resistance of Stainless Steel Welded Joints

bon has not been organized; no reliable method for prevention of carburization of the seam during manual electric arc welding has been developed; infrequent use of argon arc welding in chemical machine building; impossibility of thermal processing of outsize chemical machinery in machine building plants; lack of reliable methods and devices for non-destructive determination of intercrystallite corrosion in welded joints; lack of specific standards in the selection of electrodes and basic metals depending on the corrosive medium in which weldments will operate; slow progress of research into the use of steels with a reduced nickel content for equipment operating in corrosive media; slow introduction of non-corrosive arc-welded pipes; total shortage of pipes, sheets, etc, of 1Kh18N9T steel with increased titanium content $\frac{Ti}{C - 0.02} \geqslant 6$; shortage of double-layer low-carbon steel Kh18N12M2I, shortage of field furnaces for thermal processing of laid pipes.

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DMITRIYEV, P.T., inzh.; NIKOLAYEV, V.M., inzh.; ROZANOV, G.A., kand.-tekhn.nauk

AGN-8-26M automatic pipe-welding machine with a hoseless gas feed. Sbor.st. NIIKHIMMASH no.33:85-98 '60. (MIRA 15:5)
(Welding--Equipment and supplies)

S/125/60/000/05/12/015

AUTHOR: Dmitriyev, P. T.

TITLE: All-Union Conference on Corrosion Resistance of Welded Joints in Stainless Steel

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 5, pp. 89-92

TEXT: In accordance with a decision of the Koordinatsionnyy sovet po svarke (Coordination Council for Welding), an All-Union conference on corrosion resistance of welded joints in stainless steel was convened in NIIKhIMMASh on December 9-10, 1959, in which 240 delegates from industrial works, research institutes, educational institutions and designing organizations participated. The conference was opened by Yu. M. Vinogradov, Deputy Director of NIIKhIMMASh, who stated that the development of the chemical industry will require a large variety of materials, including stainless steel. P. T. Dmitriyev, F. F. Khimushin, and Z. F. Istrina (NIIKhIMMASh) reported on the corrosion resistance of "18-8" type steel welds and on the positive effect of heat treatment; they proved that very low carbon content is needed to reduce intercrystalline and knife corrosion in welds (not higher than 0.03-0.05%) of nickel-chrome steel.

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S/125/60/000/05/12/015

All-Union Conference on Corrosion Resistance of Welded Joints in Stainless Steel

In media containing nitric acid, welds made with "TsL-11" ("Sv-1Kh18N9B") have the highest corrosion resistance, and alloying "18-8" weld metal with molybdenum or silicon and vanadium (together) reduces the corrosion resistance in such media. B. I. Medovar and N. A. Langer of Institut elektrosvarki im. Ye. O. Patona (Electric Welding Institute imeni Ye. O. Paton) read a report on the corrosion resistance of "1Kh18N9T" steel in nitric acid and stated that austenit-ferritic welds made under flux with "EI649" wire and alloyed additionally with vanadium, niobium and silicon have high corrosion resistance in HNO_3 of a 40-50% concentration in 50-100°C, and in mixtures of nitric acid with aluminum nitrate in 90°C. V. K. Zhuravlev, M. M. Kurtepov and M. N. Fokin of IFKh AN SSSR (IFKh AS USSR) informed on a new potentiostatic method for determining the tendency toward intercrystalline corrosion in welds. A. S. Gryaznova and M. M. Kurtepov (IFKh AS USSR) discussed some corrosion aspects of welds made by argon arc welding in nitric acid. Negative effect of CO_2 and O_2 present in argon was proved, and the effect of the joint thickness and the steel structure on the corrosion resistance in acid solutions was studied.

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All-Union Conference on Corrosion Resistance of Welded Joints in Stainless Steel

Increased corrosion proofness of "1Kh18N9T" and "Kh18N12M2T"[18] steel welds made by automatic argon arc welding was stated in the report of A. I. Akulov and V. V. Spitsyn of MVTU im. N. E. Baumana (MVTU imeni Bauman). In their experiments a jet of cooling water was directed on weld metal already crystallized or on the molten pool, and it was proved that forced cooling markedly raised the resistance against intercrystalline corrosion in welds made with "Sv-0Kh18N9" and "Sv-1Kh18N9T" steel. A higher cooling rate considerably reduced the knife corrosion in "1Kh18N12M2T" steel welds. In the report by P. T. Dmitrivev and V. N. Dyatlova (NIIKhIMMASh) the results of an investigation into joints of "1Kh18N9T" steel pipes for work in nitric acid were described, made with different electrodes under assembly conditions; where the "TsL-11" ("Sv-1Kh18N9B") electrodes proved best for pipes designed for work in 65% HNO_3 at temperatures not higher than 100°. In her report on means raising the resistance of "1Kh18N9T" stainless steel welds against intercrystalline corrosion, G. G. Pocheptsova (of UkrNiiKhIMMASh) informed on an optimum heat treatment process and a welding wire composition, "1Kh18N9TYu"[18] alloyed with titanium and aluminum,

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ensuring the resistance. The report by V. K. Cherkasov and K. K. Polyakova (Irkutsk Branch of NIIKhIMMASh) dealt with the durability of "Kh18N12M2T" and "Kh21N5T" ("EI811") steel welds in some media. The authors stated that the "Kh18N12M2T" grade is applicable in equipment for partial dewatering of hot acid slurry. It was stated that welds made with "NZh-5" and "NZh-13" electrodes showed signs of intercrystalline corrosion after the tests; welds made with "IZTM" electrodes developed no intercrystalline corrosion, whereas metal samples fused by these electrodes tended to this kind of corrosion. Corrosion resistance of welds from "1Kh14N14V2M" ("EI257") steel, made with "NST-3" and "TsT-1" electrodes after different times of use in a "No. 7 VTI" uniflow super-boiler, was treated by I. N. Laguntsov and T. A. Mikhaylova (of VTI). It was stated that superheated steam from pure condensate caused no cracks, but caustic soda or sodium sulfate added into such steam did cause transcrystalline cracks in welds; sodium phosphate considerably delayed the crack formation, and an addition of sodium chloride into superheated steam caused no cracks at all in welds. I. G. Volikova, A. N. Krutikov and A. P. Akshentseva

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(NIIKhIMMASh) informed on the results of an investigation into the weldability of "Kh17T" and "Kh17N2" steel types. These steels proved weldable with "TsL-11" ("Sv1Kh18N9B") austenite electrode. Annealing at 680-700°C was necessary to increase the corrosion resistance of "Kh17N2" welds, but welds from "Kh17T" required no heat treatment, but heating of such welds to 100-150°C abruptly raised the impact resistance of the heat-affected zone. Welded equipment from these steel types can be used for work with acetic, phosphoric and nitric acid and in alkali with an oxidizer in appropriate concentrations and temperatures. G. I. Gerasimenko, P. T. Dmitriyeva, Ye. K. Revazova and Yu. I. Sorokina (NIIKhIMMASh, NIOPIK) reported on the results of selecting a welding process for "1Kh18N9T" and "Kh18N12M2T" steels used in equipment for production of maleic anhydride. Automatic and hand argon arc welding with "Sv-0Kh18N9" steel wire must be employed in welding equipment made of "1Kh18N9T" steel working in 45% maleic acid; for equipment made of "Kh18N12M2T" steel and designed for work in 45% maleic acid with benzole and xylene, "NZh-13" ("Sv-Kh18N11M") electrodes are recommended. S. V. Yunger, B. I. Medovar and N. A. Langer

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All-Union Conference on Corrosion Resistance of Welded Joints in Stainless Steel

from SNIITMASh and Institut elektrosvarki im. Ye. O. Patona (Electric Welding Institute imeni Ye. O. Paton) reported on the subject "Corrosion Resistance of Welded Joints in "1Kh18N9T" Steel, in Refining Sulfurous petroleum of Eastern Deposits" (was published in "Avtomaticheskaya svarka" 1960, No. 3). B. I. Levi (NIUIF) shared experience with welded apparatus used in production of different acids and mineral fertilizers; welded structures of "1Kh18N9T", "Kh18N12M2T", "Kh23N28M2T", and "OKh23N28M3D3T" steel types proved well in the production of catalytic sulfuric acid, tower fluorsilicic acid and extraction phosphoric acid. I. A. Levin and V. A. Nikiforov (Giproneftemash) proved in their report on "Causes of Low Intercrystalline Corrosion Resistance of welded joints of "1Kh18N9T" steel and Methods for Improving It" that the source of weldmetal carbonization is calcium carbonate (marble) in the electrode coating, and the argon arc welding eliminates this carbonization. L. P. Bakhrakh and L. S. Livshits (VNIIST) showed in their report "Radiographic Investigation of the Distribution of Niobium in Stainless Steel Welds" that in austenite-ferritic "1Kh18N9B" welds niobium is

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distributed mainly between the ferrite and the carbide phases. At usual Nb:C relation of 8:1 the most part of niobium is dissolved in ferrite. The transfer of Nb from ferrite into carbides ends at 850°C, and stainless steel becomes resistant against intercrystalline corrosion. The information by N. V. Khimchenko and V. N. Prikhod'ko (NIIKhIMMASh) concerned physical inspection methods for intercrystalline corrosion in stainless steel. M. M. Kristal' (NIIKhIMMASh) reported on corrosion resistance of electrically welded pipes of "1Kh18N9T" steel in corrosive media. Their resistance in diluted alkali, nitrates, and in saturated magnesium chloride solution equals the resistance of the base metal. G. L. Shvarts, A. N. Krutikova, and A. P. Akshentseva (NIIKhIMMASh) informed on the results of testing for more than 5,000 hours welded "1Kh18N9T", "Kh18N12M2T" and "Kh18N12M3T" steel joints in gallate solutions. The joints proved prone to transcrystalline cracking. Recommendations were included. I. M. Vagapov of Moskovskiy svarochnyy zavod (Moscow Welding Works) reported on the unification of unstabilized electrodes for "18-8" steel. The possibility for a unification of the "ENTU-3" ("Sv-0Kh18N9"), "TsL-2"

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All-Union Conference on Corrosion Resistance of Welded Joints in Stainless Steel

("Sv-0Kh18N9"), "F-1" ("Sv-0Kh18N9") and other electrode grades was investigated. It was proved possible to replace all electrodes investigated by only one or two non-stabilized electrode grades with metallic chromium introduced additionally in the coating. It was stated in discussions that the research institutes and industrial works have done considerable work for obtaining corrosion proof joints in stainless steel, though not all problems in this matter are solved yet.

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S/184/61/000/001/010/014
A104/A029

AUTHORS: Dmitriyev, P.T., Nikolayev, V.M., Engineers, Rozanov, G.A., Candidate of Technical Sciences

TITLE: Automatic Pipe Welding Apparatus АГН-8-28М (AGN-8-28M) With Hoseless Gas Supply

PERIODICAL: Khimicheskoye Mashinostroyeniye, 1961, No. 1, pp. 43-45

TEXT: The new pipe welding apparatus was designed by N.F. Shalagin and I.F. Kuz'min of the NIIKhIMMASh. The apparatus is equipped with a control panel for non-turning argon arc welding of pipes 8-26 mm in diameter made of 1Х18Н9Т (1Kh18N9T) steel. Welding is performed with 1.5 - 2.0 mm tungsten electrodes. The apparatus is mobile and suitable for currents of up to 100 amp. Its dimensions are: 130 x 102 x 210 mm and the weight is 5.5 kg. The apparatus consists of a welding head (Fig. 2) which is suspended on one of the pipes which are preliminarily centered by a special device (Fig. 3). In order to insure accurate position of the electrode the head can be moved 6 mm in either direction. Argon is supplied by a special mechanism designed by V.M. Nikoayev (Patent No. 111460).

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A104/A029

Automatic Pipe Welding Apparatus АГН-8-28М (AGN-8-28M) With Hoseless Gas Supply

Welding can be carried out with d-c or a-c of 490 cps. Various pipe joints welded by this apparatus are shown in Fig. 6. The filler can be made on the lathe and under field conditions by a special device driven by a PC-8 (RS-8) drill. Permanent metal linings are made of the same material as pipes and their length is 25-28 mm. Centrally placed cut rings serve as seals. They are made of 1Kh18N9T steel with a carbon content not exceeding 0.05%. Rings are 1 mm thick and their outside diameter exceeds that of the pipes by 3-5 mm. Welding is carried out in a single process without preliminary tacking. The filler of the tungsten electrode (from a torch nozzle) is 5-7 mm long, the clearance between the electrode and the weldment is 0.5-1.2 mm. All weldments were of satisfactory quality. There are 6 figures and 2 tables.

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A104/A029

Automatic Pipe Welding Apparatus АГН-8-28М (AGN-8-28M) With Hoseless Gas Supply

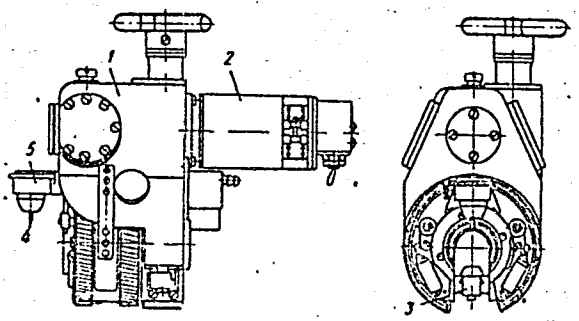

Fig. 2: АГН-8-28М (AGN-8-28M) welding head.
1. cone
2. МУ-50 (MU-50) electrometer
3. fixture
4. electrode
5. torch

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A104/A029

Automatic Pipe Welding Apparatus АГН-8-28М (AGN-8-28M) With Hoseless Gas Supply

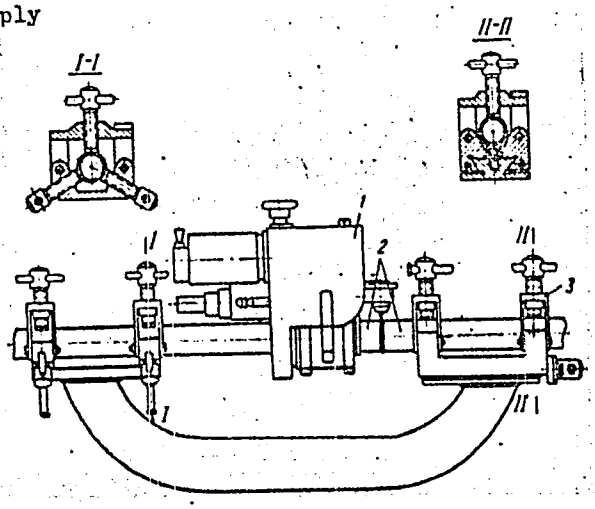

Fig. 3: Fixture for tubes with the welding head.
1. welding head
2. tube
3. fixing bolts

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Automatic Pipe Welding Apparatus -8-28M (AGN-8-28M) With Hoseless Gas Supply

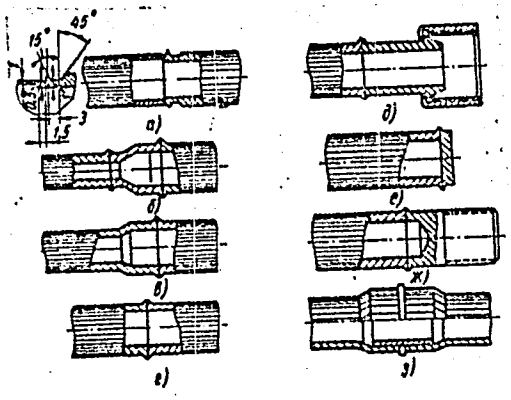

Fig. 6: Various designs of welded joints

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S/137/63/000/003/006/016
A006/A101

AUTHOR: Dimitriyev, P. T.

TITLE: Welding bi-layer 20K + Kh18N12M2T (Kh18N12M2T) steel of 30 - 36 mm total thickness

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1963, 10, abstract 3E55 ("Tr. Vses. n.-i. i konstrukt. in-t khim. mashinostr.", 1962, no. 38, 19 - 37)

TEXT: Information is given on results of investigating the weldability of bi-layer 20K+Kh18N12M2T steel. Bi-layer steel can be welded either by the automatic method from the side of the basic (carbon) layer with electrode wire СВ-08ГА (sv-08GA) under a layer of ОСЦ-45 (OSTs-45) flux with subsequent welding-up in two passes from the clad layer side with electrodes ЭНТУ-3/св-Х25Н13 (ENTU-3/sv-Kh25N13) and НЖ-13/св-Х18Н11М (NZh-13/sv-Kh18N11M); or by manual welding of the carbon layer with K-5 electrodes and of the cladding layer with ENTU-3/sv-Kh25N13 and NZh-13/sv-Kh18N11M electrodes. Two-sided welding of a Kh18N12M2T-bi-layer steel composition can be performed with the follow-

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ing electrode grades: a) in welding from the carbon layer side with ENTU-3/sv--Kh25N13 electrode; b) in welding from the cladding layer side with ENTU-3/sv--Kh25N13 and NZh-13/sv-Kh18N11M electrodes. The cladding layer is welded in a shielding gas atmosphere in 3 passes, using BT-15 (VT-15) tungsten electrode with argon blast. The welding of the subsequent layers is performed with ENTU-3/sv-Kh25N13 electrode. The welds from the cladding layer side in the initial state (after welding) are resistant against intercrystalline corrosion.

V. Fomenko

[Abstracter's note: Complete translation]

ACCESSION NR: AR4027933 S/0137/64/000/002/E005/E005

SOURCE: RZh. Metallurgiya, Abs. 2E32

AUTHOR: Dmitriyev, P. T.; Kovalev, O. D.

TITLE: Argon-hydrogen welding of nickel and nickel-based alloys

CITED SOURCE: Tr. Vses. n.-i. i konstrukt. in-t khim. mashinostr., vy*p. 43, 1963, 70-76

TOPIC TAGS: argon arc welding, nickel welding, nickel alloy welding

TRANSLATION: To prevent the formation of pores in the metal of the weld seam in the manual and automatic Ar-arc welding of NP-2 Ni, monel metal NMZhMts28-2.5-1.5, and Ni with monel metal and monel metal with Khl8N9T steel, 3.2-3.5% H_2 is added to Ar; the H_2, by combining with O_2, prevents the latter from penetrating into the weld metal as Ni oxide. The mechanical properties of the weld seam are: (1) for NP-2, σ_b 37.2 kg/mm^2; a_k 9.6 kgm/cm^2; (2) for NMZhMts28-2.5-1.5, σ_b 51.3 kg/mm^2; a_k 10.2 kgm/cm^2; (3) for NMZhMts28-2.5-1.5 and NP-2, σ_b 42.2 kg/mm^2; a_k 9.9 kgm/cm^2; (4) for NMZhMts28-2.5-1.5 and Khl8N9T, σ_b 52 kg/mm^2; a_k 8.5 kgm/cm^2. The bending angle is 180° in all cases. Yu. Sokolov

Card 1/2

ACCESSION NR: AR4027933

DATE ACQ: 19Mar64 SUB CODE: ML ENCL: 00

Card 2/2

DMITRIYEV, P.V.

[Minor mechanization of press forging] Malaia mekhanizatsiia pri kovke pod pressami. Sverdlovsk, Gos. nauchno-tekhn. izd-vo mashinostroit.i sudostroit. lit-ry [Uralo-Sibirskoe otd-nie] 1953. 29 p. (Za peredovoe, novoe, progressivnoe) (MLRA 7:4)
(Forging)

PHASE I BOOK EXPLOITATION SOV/4476

Dmitriyev, Petr Vasil'yevich

Mekhanizatsiya v proizvodstve metallokonstruktsiy (Mechanization in the Manufacture of Metallic Articles) Moscow, Mashgiz, 1960. 90 p. 6,000 copies printed.

Reviewer: A.I. Alekseyev, Engineer; Ed.: I.M. Pintusov, Engineer; Managing Ed. (Ural-Siberian Department, Mashgiz): T.M. Somova, Engineer; Tech. Ed.: N.A. Dugina.

PURPOSE: This booklet is intended for technical personnel.

COVERAGE: The author summarizes the experience of the Uralmashzavod (Ural Machine-Building Plant) in the mechanization of manufacturing metallic articles. Devices and installations for the mechanization of the following time- and labor-consuming processes are described: blanking, bending, gas cutting, drilling, assembling, and welding. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Card 1/2

ACCESSION NR: AT4031808 S/2914/62/000/079/0031/0039

AUTHOR: Bibichkova, R. P.; Dmitriyev, R. P.

TITLE: Pilot's identification aids

SOURCE: Leningrad. Tsentral'ny*y nauchno-issledovatel'skiy institut morskogo flota. Informatsionny*y sbornik, no. 79, 1962. Sudovozhdeniye i svyaz' (Navigation and communications), no. 20, 31-39

TOPIC TAGS: pilot identification aid, navigation aid, electronic identification aid, harbor traffic, harbor radar, radar, uhf communication, radar repeater

ABSTRACT: In order to facilitate easy identification of various ships on the screen of a harbor traffic control radar, the pilots are equipped with electronic identification aids. These devices, although experimented with in the West, are being designed in the SSSR for the first time. There are two basic classes of identification devices: 1) Devices which respond on a uhf communication link, 2) Radar repeater type. The design of experimental models of both types was performed at the Tsentral'ny*y nauchno - issledovatel'skiy institut morskogo flota (Central Naval Scientific Research Institute) in 1960-61. Figure 1 of the Enclosure shows the block diagram of the uhf device. A pulse received from the

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ACCESSION NR: AT4031808

harbor radar station is detected, amplified and used to modulate either the pilot's portable uhf transmitter or the ship's uhf radio. Voice transmission is excluded during the identification period. The parameters of the device are: sensitivity 65 db/watt for 1 μsec pulse, output voltage amplitude 50-60 volts (4 μsec pulse), power consumption 1.34 watt, supplied by battery with lifetime of 1.5 hours or from pilot's uhf set. The device is made in the form of a pistol and the total weight is 1 kg. A special receiver for reception of pulse modulated uhf signals on shore has a sensitivity of 5 μwatts, an output voltage of 3-4 volts, a carrier frequency of 157 mc, a bandwidth of 2 mc, an image rejection of 70 db, an intermediate frequency rejection of 44 db, and a power requirement of 70 watts. The maximum range from shore to ship is 20 miles and from ship to shore is only 6-8 miles (pilot's portable uhf set). The block diagram of the radar repeater type of device is shown in Figure 2 of the Enclosure. Its characteristics are as follows: receiver sensitivity 55 db/watt, pulse length 4 μsec, peak power 300 mw, processing delay 2 μsec, horn antenna gain 30 (two used), azimuth beamwidth 66.5°, elevation beamwidth 22°, working time 4 hrs., weight 5 kg, maximum range 18-20 miles. A photograph of the indicator screen showing the identification mark produced by this system is shown in Figure 3 of the Enclosure. Depending upon the display gain adjustment, the mark is either 6 separate points or one solid line 3.4 cable lengths (2066 ft.) long, appearing 973 ft. behind the

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ACCESSION NR: AT4031808

ship's echo. It was concluded that the repeater can be used on all ships immediately and that the uhf device should find an application on ships with permanent uhf communication installations. Orig. art. has: 7 figures.

ASSOCIATION: Tsentral'ny*y nauchno-issledovatel'skiy institut morskogo flota, Leningrad (Central Naval Scientific Research Institute)

SUBMITTED: 00 DATE ACQ: 05May64 ENCL: 03

SUB CODE: NG, EC NO REF SOV: 002 OTHER: 000

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410520009-0"

ACCESSION NR: AT4031808

ENCLOSURE: 01

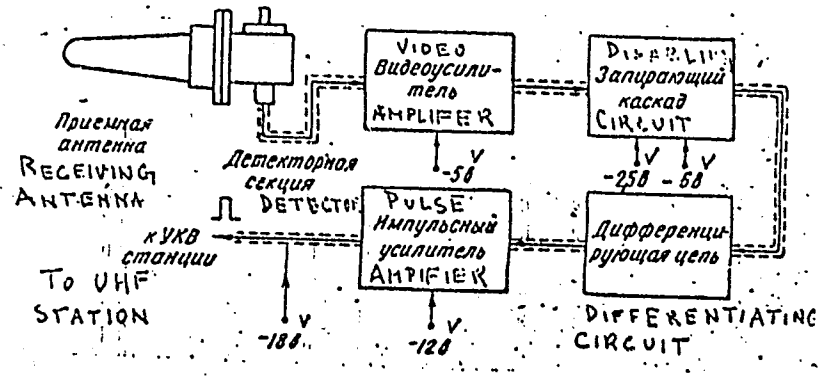

Fig. 1 - Block diagram of pilot's identification aid

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ACCESSION NR: AT4031808

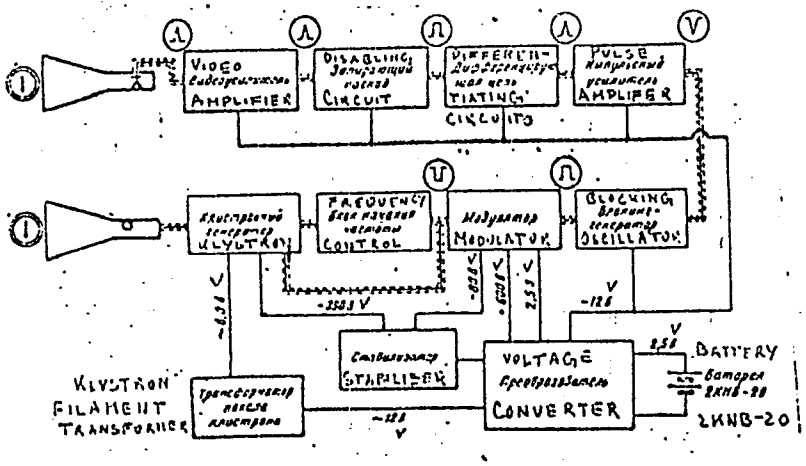

Fig. 2 - Block diagram of pilot's identification aid

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ACCESSION NR: AT4031808

ENCLOSURE: 03

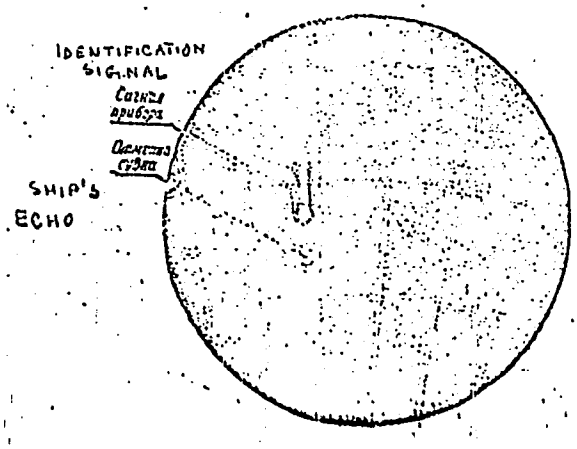


Fig. 3 - Picture on the screen of a radar sector indicator. The identification signal is visible in the form of a wide line behind the ship's echo.

Card 6/6

MINACHEV, Kh.M.; VAKK, E.G.; DMITRIYEV, R.V.

Isotopic exchange of hydrogen in hydrocarbons on rare earth oxides. Report No.1: Deuterium exchange reaction on neodymium oxide between cyclohexane and deuterium. Izv.AN SSSR.Otd.khim.nauk no.6:1086-1093 '62. (MIRA 15:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Deuterium) (Cyclohexane) (Neodymium oxide)

MINACHEV, Kh.M.; VAKK, E.G.; DMITRIYEV, R.V.; NASEDKIN, Ye.A.

Isotopic exchange of hydrogen in hydrocarbons on rare-earth oxides. Report No.2: Deuterium exchange in cyclohexane on neodymium, gadolinium, aluminum oxides, cerium dioxide, and neodymium [redacted] oxide on aluminum oxide. Izv. AN SSSR. Ser.khim. no.3:421-426 Mr '64. (MIRA 17:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

MINACHEV, Kh.M.; VAKK, E.G.; DMITRIYEV, R.V.; NASEDKIN, Ye.A.; FEDYUNIN, Yu.A.

Isotopic exchange of hydrogen in hydrocarbons on rare-earth oxides. Report No.3: Deuterium exchange in hydrocarbons on gadolinium oxide. Izv. AN SSSR. Ser. khim. no.4:618-625 '65. (MIRA 18:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

DMITRIYEV, S.

USSR/ Electronics - Radio receivers

Card 1/ 1 Pub. 89 - 26/31

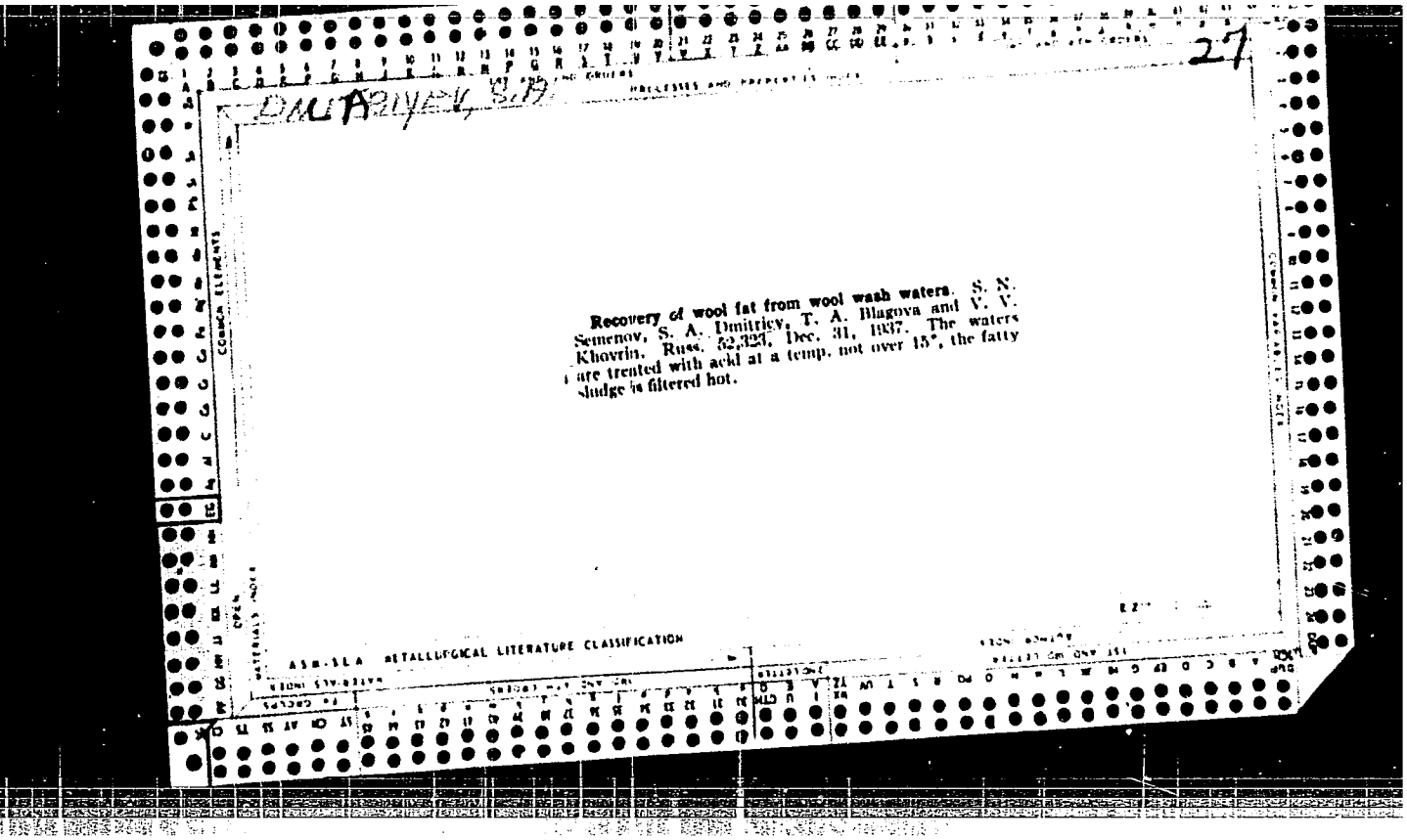
Authors : Markov, D., and Dmitriev, S.

Title : Superheterodyne battery receiv r

Periodical : Radio 11, 53-55, Nov 1954

Abstract : A simple, four-tube battery-type superheterodyne receiver, assembled mainly from parts from the "Moskvich" receiver is described. The receiver operates on long (723-2000 m) and medium (187-578 m) wave-band ranges. Particulars pertaining to the receiver's parameters are set forth. A general layout diagram including a circuit diagram showing the arrangement of parts and featuring the separate stages in each of the bands, the various types of capacitors, filters, oscillating circuits, and the tubes used, is presented. The description of the chassis is given along with tabulated detailed data on transformer coil-windings. The types of storage batteries used and their designations and the voltages required for normal operation and for increasing the volume are also given. Circuit diagram; illustrations; table.

Institution : ...
Submitted : ...



Recovery of wool fat from wool wash waters. S. N. Semenov, S. A. Dmitriev, T. A. Blagova and V. V. Khovrin. Russ. 52,325, Dec. 31, 1937. The waters are treated with acid at a temp. not over 15°, the fatty sludge is filtered hot.

DMITRIYEV, S.A.

DMITRIYEV, S.A.; RUBINDER, P.A., redaktor.

[Soap and new cleansing agents] Myla i novye moiushchie sredstva. Moskva, Izd-vo Akademii nauk SSSR, 149 p. (MLRA 6:12)
(Soap) (Cleaning compounds)

1. DMITRIYEV, S. A., Engr.

2. USSR (600)

4. Plywood Industry

7. Improve veneer repair.
Der. i lesokhim. prom. 1 No. 4, 1952

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

DMITRIYEV, S.A.

5(3) PHASE I BOOK EXPLOITATION SOV/2995

Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komissiya po khromatografii

Ionnyy obmen i yego primeneniye (Ion Exchange and Its Application) Moscow, Izd-vo AN SSSR, 1959. 318 p. Errata slip inserted. 4,000 copies printed.

Ed.: K. V. Chmutov, Corresponding Member, USSR Academy of Sciences; Eds. of Publishing House: T. G. Levi and N. G. Yegorov; Tech. Ed.: G. N. Shevchenko.

PURPOSE: This book is intended for factory and scientific research laboratory personnel, engineers, teachers and advanced students at vuzes concerned with the study of ion-exchange processes.

COVERAGE: This collection of seven articles treats the principal trends in the investigation and application of ion-exchange processes in heterogeneous media, and reviews the present state of ionite synthesis and application. No personalities are mentioned. References are given at the end of each article.

Adel', I. B., and S. A. Dmitriyev. The Use of Ionites in Industry	255
Klyachko, V. A. Ionite Membranes	285
Adel', I. B. and S. A. Dmitriyev. The Use of Ionites in Medicine	307

AVAILABLE: Library of Congress

Card 3/3

TM/mmh
1-29-60

KHOTUNTSEV, Leontiy Leont'yevich; DMITRIYEV, S.A., kand.tekhn.nauk, otv. red.; YEGOROV, N.G., red.izd-va; LEBEDEVA, L.A., tekhn.red.

[Physical and chemical phenomena occurring during the briquetting of solid fuels] Fiziko-khimicheskie iavleniia v protsessakh briketirovaniia tverdogo topliva. Moskva, Izd-vo Akad.nauk SSSR, 1960. 146 p. (MIRA 13:10)

(Briquets (Fuel))

DMITRIYEV, S.A.; KARAVAYEV, N.M.; SMIRNOVA, A.V.

Synthesis of surface active agents based on ω-chlorocarboxylic acids. Izv.AN SSSR.Otd.khim.nauk no.10:1800-1803 O '61. (MIRA 14:10)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Surface active agents) (Acids, Organic)

DMITRIYEV, S.A., kand.tekhn.nauk; KORENEV, K.D., inzh.; TSVETKOV, O.N., inzh.

Continuous alkylation of peat phenols in the presence of ion exchange resin. Torf. prom. 39 no.8:16-18 '62. (MIRA 16:1)

1. Institut goryuchikh iskopayemykh.
(Alkylation) (Phenols) (Ion exchange)

TSVETKOV, O.N.; DMITRIYEV, S.A.; KARAVAYEV, N.M.; KORENEV, K.D.

Coal chemical cresols as raw material for the production of surface-active substances. Koks i khim. no.10:40-44 '63. (MIRA 16:11)

1. Institut goryuchikh iskopayemykh AN SSSR.

VOLODINA, L.A.; KLYUCHAREV, S.V.; DMITRIYEV,S.A.; YAVORSKIY, B.M.

Spectrophotometric analysis of the selectivity of direct dyes by staple fabrics. Izv.vys. ucheb. zav.; tekh. tekst. prom. no.6:124-129 '63 (MIRA 17:8)

1. Moskovskiy tekstil'nyy institut, shelkootdelochnaya fabrika imeni Ya.M. Sverdlova.

DMITRIYEV, S.A.

DMITRIYEV, S.A.; KALATUROV, B.A., kand. tekhn. nauk; ZHITOMIRSKIY, V.K., doktor tekhn. nauk [translator].

"Prestressed reinforced concrete and its use in practice" [in German] by F. Leonhardt. Reviewed by S.A. Dmitriev, B.A. Kalaturov. (Prestressed concrete construction) (Leonhardt, F.)

DMITRIYEV, S.A.

Levin, S. Ya. and Dmitriyen, S.A. "Hollow-girder flooring with previously strained armature," Stroit. prom-st', 1948, No. 12, p. 10-12

SO: U-2888, Letopis,Zhurnal'nykh Statey, No. 1, 1949

DMITRIYEV, S.A., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii.

Industrial production of reinforcements in plants for reinforced concrete construction. Biul.stroi.tekh. 10 no.11:4-6 Je '53. (MLRA 6:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut promyshlennykh sooruzheniy. (Reinforced concrete construction)

DMITRIYEV, S.A., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk.

Effect of anchoring prestressed concrete reinforcing bars on the conduct of beams under load. Stroi.prom. vol. 31 no.9:29-33 S '53. (MLRA 6:9)
(Concrete, Prestressed)

DMITRIYEV, S.A., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk;
MULIN, N.M., inzhener, laureat Stalinskoy premii

Hot-rolled corrugated reinforcements made of low-alloy steel. Bet. i zhel.-bet. no.1:28-32 Ap '55. (MLRA 8:9)
(Reinforced concrete)

DMITRIYEV, S.A., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk.

More precise formulas for determining prestress in concrete and reinforcements. Bet. i zhel.-bet. no.2:53-58 F '56. (MLRA 9:6)
(Prestressed concrete)

DMITRIYEV, S.A.

USSR/Agriculture - Conferences

Card 1/1 Pub. 124 - 23/28

Authors : Dmitriyev, S. A.

Title : Proper utilization of pentosan containing raw materials

Periodical : Vest. AN SSSR 26/1, 99-101, Jan 1956

Abstract : Minutes are presented from the All-Union Conference of agriculturist held in Riga Latv. SSR where problems of proper utilization of organic raw materials containing pentosan were debated.

Institution : .....

Submitted : .....

DMITRIYEV, S.A.

AUTHORS: Gvozdev, A.A. (Professor), and Dmitriyev, S.A. (Cand.Tech. Sci.) 97-5-6/13

TITLE: Calculation of prestressed concrete, ordinary reinforced concrete and plain concrete sections for the prevention of crack formation. (K raschetu predvaritel'no napryazhennykh, obychnykh zhelezobetonnykh i betonnykh secheniy po obrazovaniyu treshchin).

PERIODICAL: "Beton i Zhelezobeton" (Concrete and Reinforced Concrete) 1957, No.5, pp.205-211 (USSR).

ABSTRACT: Stress diagrams are used as basis for the above calculations. In these diagrams the stress in the tensioned zone is represented by a rectangle in the tension area and its base Rp = the breaking stress. Professor V.I.Murashev recommended a simplification of the calculations by extension of the linear stress diagram from the compressed zone to the tensioned zone so that the magnitude of the extreme tensioned fibre = 2Pr(Viz.Fig.1). This simplification gives much more simplified formulae which are of great advantage during the calculation of prestressed sections. This simplified method is described in the work by Professor V.V.Mikhaylov: "Investigations on Ordinary and Prestressed Reinforced Concrete Constructions" (Issledovanie Obychnykh i Predvaritel'no Napryazhennykh Zhelezobetonnykh Konstruktsiy) which was

Card 1/2

Calculation of prestressed concrete, ordinary reinforced concrete and plain concrete sections for the prevention of crack formation. (Cont.) 97-5-6/13

published in the "Sbornik Trudov TsNIPS (ЦНИПС), Stroyizdat, 1949. It contains tables and instructions for the calculation of prestressed constructions (I - 148 - 50, I - 148 - 52). The calculation of crack formations in pretensioned and ordinary reinforced concrete constructions effected by bending or eccentrical bending is carried out by using the simplified formulae.

There are 9 figures.

AVAILABLE:

Card 2/2

AUTHORS: ~~Dmitriyev, S. A.~~ and Kalaturov, B.A. (Candidates of Technical Sciences) 97-57-9-16/17

TITLE: Criticism of F. Leongardt: "Prestressed Reinforced Concrete and its Practical Application" published by Gosstroiizdat 1957. (F. Leongardt Napryazhenno armirovannyy zhelezobeton i ego prakticheskoye primeneniye Gosstroiizdat, 1957).

PERIODICAL: Beton i Zhelezobeton, 1957, Nr.9. p.377 (USSR).

ABSTRACT: Translated from the German by V. K. Zhitomirskiy.

AVAILABLE: Library of Congress.

1. Concrete-Reinforced-Prestressed 2. Concrete-Applications

Card 1/1

GVOZDEV, A.A., prof., doktor tekhn. nauk; MIKHAYLOV, V.V., prof.; DMITRIYEV, S.A., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; KALATUROV, B.A., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; TABENKIN, N.L., inzh.; KOSTYUKOVSKIY, M.G., kand. tekhn. nauk; VASIL'YEV, B.F., inzh.; pri uchastii kand. tekhn. nauk O.Ya. BERG i inzh. I.S. PRIKHOD'KO; TEMKIN, L.Ye., inzh., red.; PETROVA, V.V., red. izd-va; EL'KINA, E.M., tekhn. red.

[Instructions for designing prestressed reinforced concrete structures] Instruktsiia po proektirovaniiu predvaritel'no napriazhennykh zhelezobetonnykh konstruktsii (SN 10-57); utverzhdena Gosudarstvennym komitetom Soveta Ministrov SSSR po delam stroitel'stva 14 oktiabria 1957 g. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 239 p. (MIRA 11:5)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Laboratoriya teorii zhelezobetona i armatury i Laboratoriya predvaritel'no napryazhennykh konstruktsiy Nauchno-issledovatel'skogo instituta betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR (for Gvozdev, Mikhaylov, Dmitriyev, Kalaturov). 3. Gosudarstvennyy institut tipovogo proyektirovaniya i tekhnicheskikh issledovaniy Glavstroyproyekta (for Tabenkin, Kostyukovskiy, Vasil'yev). 4. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Gvozdev, Mikhaylov)
(Prestressed concrete construction)

BERDICHEVSKIY, G.I., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; MIKHAYLOV, K.V., kand.tekhn.nauk; GVOZDEV, A.A., prof., doktor tekhn.nauk; MIKHAYLOV, V.V., prof., doktor tekhn.nauk; BULGAKOV, V.S., kand.tekhn.nauk; VASIL'YEV, A.P., kand.tekhn.nauk; YEVGEN'YEV, I.Ye., kand.tekhn.nauk; MULIN, N.M., kand.tekhn.nauk; SVETOV, A.A., kand.tekhn.nauk; FRENKEL', I.M., kand.tekhn.nauk; BELOBROV, I.K., inzh.; MATKOV, N.G., inzh.; MITNIK, G.S., inzh.; SKLYAR, B.L., inzh.; SHILOV, Ye.V., inzh.; MASENKO, I.D., inzh.; NIZHNICHENKO, I.P., inzh.; FILIPPOVA, G.P., inzh.; MIZERNYUK, B.N., kand.tekhn.nauk; SHEYNFEL'D, N.M., kand.tekhn.nauk; BALAT'YEV, P.K., kand.tekhn.nauk; BARBARASH, I.P., kand.tekhn.nauk; MITGARTS, L.B., kand.tekhn.nauk; SHIFRIN, M.A., kand.tekhn.nauk; PETROVA, V.V., red.izd-va; TEMKINA, Ye.L., tekhn.red.

[Temporary instruction on the technology of making prestressed reinforced concrete construction elements] Vremennaia instruktsiia po tekhnologii izgotovleniia predvaritel'no napriazhennykh zhelezobetonnykh konstruktsii. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 255 p. (MIRA 12:12)

(Continued on next card)

BERDICHEVSKIY, G.I.---(continued) Card 2.

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo. 2. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR (for Gvozdev, V.V.Mikhaylov, Berdichevskiy, Bulgakov, Vasil'yev, Dmitriyev, Yevgen'yev, K.V.Mikhaylov, Mulin, Svetov, Frenkel', Belobrov, Matkov, Mitnik, Sklyar, Shilov). 3. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhpomoshchi Akademii stroitel'stva i arkhitektury SSSR (for Masenko, Nizhnichenko, Filippova, Mizernyuk, Sheynfel'd). 4. Nauchno-issledovatel'skiy institut Glavmospromstroymaterialov (for Balat'yev, Barbarash). 5. Nauchno-issledovatel'skiy institut po stroitel'stvu Minstroya RSFSR (for Mitgarts, Shifrin). 6. Deystvitel'nyye chleny Akademii stroitel'stva i arkhitektury SSSR (for Gvozdev, V.V.Mikhaylov).

(Prestressed concrete)

MURASHEV, V.A., prof., doktor tekhn.nauk; MIRONOV, S.A., prof., doktor tekhn.nauk; ALEKSANDROVSKIY, S.V., kand.tekhn.nauk; TAL', K.E., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, N.M., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; NEMIROVSKIY, Ya.M., kand.tekhn.nauk; TABENKIN, N.L., inzh. [deceased]; KALATUROV, B.A., kand.tekhn.nauk; BRAUDE, Z.I., inzh.; KRYLOV, S.M., kand.tekhn.nauk; FOKIN, K.F., doktor tekhn.nauk; GUSEV, N.M., prof., doktor tekhn.nauk; YAKOVLEV, A.I., inzh.; KORENEV, B.G., prof., doktor tekhn.nauk; DERESHKEVICH, Yu.V., inzh.; MOSKVIN, V.M.; LUR'YE, L.L., inzh.; MAKARICHEV, V.V., kand.tekhn.nauk; SHEVCHENKO, V.A., inzh.; VASIL'YEV, B.F., inzh.; KOSTYUKOVSKIY, M.G., kand.tekhn.nauk; MAGARIK, I.L., inzh.; IL'YASHEVSKIY, Ya.A., inzh.; LARIKOV, A.F., inzh.; STULOV, T.T., inzh.; TRUSOV, L.P., inzh.; LYUDKOVSKIY, I.G., kand.tekhn.nauk; POPOV, A.N., kand.tekhn. nauk; VINOGRADOV, N.M., inzh.; USHAKOV, N.A., kand.tekhn.nauk; SVERDLOV, P.M., inzh.; TER-OVANESOV, G.S., inzh.; GLADKOV, B.N., kand.tekhn.nauk; KOSTOCHKINA, G.V., arkh.; KUREK, N.M.; OSTROVSKIY, M.V., kand.tekhn.nauk; PEREL'SHTEYN, Z.M., inzh.; BUKSHTEYN, D.I., inzh.;

(Continued on next card)

MURASHEV, V.A.---(continued) Card 2.

MIKHAYLOV, V.G., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; GVOZDEV, A.A., prof., retsenzent; MIKHAYLOV, V.V., prof., retsenzent; PASTERNAK, P.L., prof., retsenzent; SHUBIN, K.A., inzh., retsenzent; TEMKIN, L.Ye., inzh., nauchnyy red.; KOTIK, B.A., red. izd-va; GORYACHEVA, T.V., red.izd-va; MEDVEDEV, L.Ya., tekhn.red.

[Handbook for designers] Spravochnik proektirovshchika. Pod obshchei red. V.I.Murasheva. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam. Vol.5. [Precast reinforced concrete construction elements] Sbornye zhelezobetonnye konstruktsii. 1959. 603 p. (MIRA 12:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut betona i zhelezobetona, Perovo. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Murashev, Gvozdev, Mikhaylov,V.V., Pasternak, Shubin). 3. Chlen-korresp. Akademii stroitel'stva i arkhitektury SSSR (for Mironov, Gusev, Moskvin, Kurek).

(Precast concrete construction).

GVOZDEV, A.A., prof., doktor tekhn.nauk; DMITRIYEV, S.A., kand.tekhn. nauk; MULIN, N.M., kand.tekhn.nauk; BALDIN, V.A., kand.tekhn. nauk; BRODSKIY, A.Ya., kand.tekhn.nauk; SOKOLOVSKIY, P.I., kand.tekhn.nauk; FRIDMAN, A.M., mladshiy nauchnyy sotrudnik. Prinimal uchastiye MADATYAN, S.A., mladshiy nauchnyy sotrudnik. KLIMOVA, G.D., red.izd-va; NAUMOVA, G.D., tekhn.red.

[Instructions for using hot-rolled ribbed 30KhG2S steel reinforcements in making prestressed reinforced-concrete construction elements] Ukazaniia po primeneniiu goriachekatanoi armatury periodicheskogo profilia iz stali marki 30KhG2S v predvaritel'no napriazhennykh zhelezobetonnykh konstruktsiiakh. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 21 p. (MIRA 14:1)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo. 2. Nauchno-issledovatel'skiy institut betona i zhelezobetona (for Gvozdev, Dmitriyev, Mulin). 3. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Gvozdev). 4. Laboratoriya metallicheskikh konstruktsiy TSentral'nogo nauchno-issledovatel'skogo instituta stroitel'nykh konstruktsiy (for Baldin, Brodskiy, Sokolovskiy, Fridman). 5. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Baldin). 6. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu (for Madatyan).
(Prestressed concrete) (Reinforcing bars)

BOGIN, Naum Mordukhovich, kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn. nauk, retsenzent; MIKHAYLOV, K.V., kand.tekhn.nauk, nauchnyy red.; KUZNETSOVA, M.N., red.izd-va; SHERSTNEVA, N.V., tekhn.red.

[Technology of prestressed reinforced concrete] Tekhnologiia predvaritel'no napriazhennogo zhelezobetona. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 330 p.
(Prestressed concrete) (MIRA 13:9)

GVOZDEV, A.A., doktor tekhn.nauk, prof.; DMITRIYEV, S.A., kand.tekhn.nauk

Designing cross sections according to the tendency to form cracks. Bet.i zhel.-bet. no.7:331-332 Jl '60. (MIRA 13:7)
(Strains and stresses)

DMITRIYEV, S.A., kand.tekhn.nauk

Effect of prestressing on the strength and hardness of reinforced concrete structures. Trudy NIIZHB no. 17:5-31 '60. (MIRA 14:4)
(Prestressed concrete)

DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, N.M., kand.tekhn.nauk; ARTEM'YEV, V.P., kand.tekhn.nauk

A study of the strength, crack resistance, and hardness of girders with 3KhG2S steel reinforcement. Trudy NIIZHB no. 17:32-67 '60. (MIRA 14:4)
(Reinforced concrete) (Girders)

ASTROVA, T.I., inzh.; DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, N.M., kand.tekhn.nauk

Anchoring ribbed reinforcing bars in ordinary and prestressed concrete. Trudy NIIZHB no.23:74-126 '61. (MIRA 14:12)
(Reinforced concrete)

MULININ, N.M., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; KRASOVSKAYA, G.M., inzh.; GVOZDEV, A.A., doktor tekhn.nauk, prof.; KLIMOVA, G.D., red.izd-va; RUDAKOVA, N.I., tekhn. red

[Temporary instructions on the use of thermally strengthened ribbed cable in prestressed concrete elements] Vremennye ukazaniia po primeneniiu termicheski uprochnennoi katanki periodicheskogo profilia v predvaritel'no napriazhennykh zhelezobetonnykh konstruktsiiakh. Moskva, Gosstroiizdat, 1962. 11 p. (MIRA 15:6)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo, 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Gvozdev).
(Concrete reinforcement)

DMITRIYEV, S.A., kand.tekhn.nauk

Making more precise the calculation of the strength of ordinary and prestressed elements of annular cross section. Trudy NIIZHB no.26:5-20 '62. (MIRA 15:7)

(Precast concrete)

DMITRIYEV, S.A., kand.tekhn.nauk

Effect of prestressing on the rigidity of reinforced concrete elements. Trudy NIIZHB no.26:120-153 '62. (MIRA 15:7)
(Prestressed concrete--Testing)

ZHUNUSOV, T.Zh., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, N.M., kand.tekhn.nauk

Anchoring ribbed hot-rolled large-diameter reinforcement in concrete. Trudy NIIZHB no.26:154-177 '62. (MIRA 15:7)
(Concrete reinforcement)

GVOZDEV, A.A., doktor tekhn.nauk, prof.; DMITRIYEV, S.A., kand.tekhn.nauk; NEMIROVSKIY, Ya.M., kand.tekhn.nauk

Calculation of the displacements (deflections) of reinforced concrete elements according to the draft of the new standards (SNiP 2-V.1-62). Bet. i zhel.-bet. 8 no.6:245-250 Je '62. (MIRA 15:7)

(Precast concrete)
(Flexure)

AM4035974 BOOK EXPLOITATION S/

Dmitriyev, Sergey Andreyevich (Doctor of Technical Sciences); Kalaturov, Boris Aleksandrovich (Candidate of Technical Sciences)

Design of prestressed reinforced concrete structures (Raschet predvaritel'no napryazhenny*kh zhelezobetonny*kh konstruktsiy), Moscow, Gosstroyizdat, 1963, 411 p. illus., biblio. Errata slip inserted. 10,000 copies printed.

TOPIC TAGS: prestressed reinforced concrete, construction, civil engineering, structural mechanics

PURPOSE AND COVERAGE: The book presents the fundamentals of the calculation and design of prestressed reinforced concrete structures in industrial, civil, agricultural, and other buildings and structures that have been developed on the basis of theoretical and experimental research and the use of these structures in construction. The book also gives general information on prestressed reinforced concrete structures. It includes: the materials used to make these structures, the sizes of the prestressed reinforcement and concrete, and the causes of stress losses. There is an analysis of the effect of prestressed reinforcement on concrete structures under various loads and working conditions. The basic features of the calculation of these structures for maximum states are given and recommendations and examples

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of design and calculations are included. The book is intended for engineers, technicians, and researchers, and also graduate students, concerned with the design, study, fabrication, and behavior of prestressed reinforced concrete structures.

TABLE OF CONTENTS [abridged]:

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SUB CODE: ME SUBMITTED: 12Nov63 NR REF SOV: 183

OTHER: 017 DATE ACQ: 16Apr64

Card 4/4

TAL', K.E., kand. tekh. nauk; LESSIG, N.N., kand. tekhn. nauk; Prinimali uchastiye: GVOZDEV, A.A.; ALEKSANDROVSKIY, S.V.; BORISHANSKIY, M.S.; DMITRIYEV, S.A.; KRILOV, S.M.; MIKHAYLOV, K.V.; MULIN, N.M.; NEMIROVSKIY, Ya.M.; CHISTYAKOV, Ye.A.; VASIL'YEV, B.F.; BOGATKIN, I.L.; ZALESOV, A.S.; NIKITIN, I.K.

New standards SNiP II-V. 1-62 for the design of concrete and reinforced concrete elements. Bet. i zhel.-bet. 9 no.3:97-102 Mr. '63. (MIRA 16:4)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR (for all except Vasil'yev, Bogatkin, Zalesov, Nikitin). 2. Gosudarstvennyy institut tipovogo proyektirovaniya i tekhnicheskikh issledovaniy (for Vasil'yev, Bogatkin, Zalesov, Nikitin).

KORENEV, K.D.; DMITRIYEV, S.A.; KARAVAYEV, N.M.; TSVETKOV, O.N.

Phenols of oil shale tar as raw material for the chemical industry.
Khim. prom. no.6:401-407 Je '64. (MIRA 18:7)

L 52332-65 EWA(j)/EWA(b)-2/EWT(1) Pa-4 RO

ACCESSION NR: AP5015648 UR/0064/64/000/007/0484/0491 24 B

AUTHOR: Korenev, K. D.; Karavayev, N.M.; Dmitriyev, S.A.; Tsvetkov, O. N.

TITLE: Phenols from shale resin--raw material for the chemical industry

SOURCE: Khimicheskaya promyshlennost', no. 7, 1964, 484-491

TOPIC TAGS: phenol, shale oil, tanning material, insecticide, fungicide

Abstract: One of the first products obtained from shale phenols are synthetic tannides used as tanning agents. Sulfonation of phenols promotes increased tanning properties of products synthesized from the phenols. However this stage is complicated by the tendency of shale resins to be oxidized, and also by the steric hindrance of polysubstituted phenols. A sulfide-cellulose extract containing ligninsulfoacids and carbohydrates is used for condensation with sulfonated phenols. The optimal ratio of reagents is 0.3:1.0. The condensation products (viscous dark-brown mass soluble in water) have good tanning properties. Studies have shown that it is possible to replace natural tanning agents with a preparation made from shale resins. The tanning agents can be obtained both from purified and crude shale resins, from high-boiling and low-

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L 52332-65

ACCESSION NR: AP5015648

boiling fractions. Dinitro-derivatives of phenols have interesting insecticidal, fungicidal, and bactericidal properties. Based on the higher fractions of shale resins (above 300° C) unsuitable for synthesizing the preparation 125, a new preparation of insecticidal action of the type of alpha-naphthyl-N-methylcarbomate -- sevin has been developed. This reduces the activity of cholinesterase of insect pests without entering into reaction with enzymes. The preparation is harmless to plants in a wide range of concentrations and is of low toxicity to animals. By acetylation of shale resins of the diesel fraction using acetic anhydride on a boiling water bath, products were obtained (at a 98% yield) exhibiting fungicidal action against 10 kinds of fungi. Phenoxyacetates are a dark mobile liquid with a specific odor, boiling at 95-200°C (16 mm Hg), is insoluble in water and soluble in organic solvents. Orig. art. has 1 figure, 2 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 077 OTHER: 019 JPRS

Card 2/2 mb

L 59349-65 EPF(c)/EWT(m)/EWG(m) Pz-4 RM/RWH

ACCESSION NR: AP5019336 UR/0020/64/157/005/1171/1173

AUTHOR: Tsvetkov, O. N.; Korenev, K. D.; Dmitriyev, S. A

TITLE: Problems of the use of the cation exchange resin KU-2 in the process of alkylation of phenols with higher olefins

SOURCE: AN SSSR. Doklady, v. 157, no. 5, 1964, 1171-1173

TOPIC TAGS: ion exchange resin, catalysis, alkylation, phenol, ion exchange

ABSTRACT: Phenol and a technical mixture of cresols were alkylated with propylene trimer in the presence of the cation exchange resin KU-2 in the H-form, dried to constant weight, and the reaction products and spent catalyst were investigated, in an effort to elucidate the main causes of the decrease in the catalytic activity of cation exchange resins, which is of great significance in the selection of the method and conditions of catalyst regeneration. Since the alkylation products did not contain sulfur, it was concluded that cleavage of the cation exchange resin under the conditions of the alkylation process and elution of the low-molecular fragments of destruction either generally does not occur

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L 59349-65
ACCESSION NR: AP5019336

or occurs to a very negligible degree. The chemical reaction of the functional groups of the cation exchange resin with the reacting component can be represented by the formation of sulfonic esters of the olefins and by the formation of sulfones with phenols and alkylphenols. In view of the fact that the cation exchange resin used in the alkylation reaction exhibited the initial exchange capacity when washed with the solvent, the liquid phase (alkylate and eluate) contained no destruction products of the cation exchange resin, and the material balance with respect to the resin indicated the absence of any substantial changes in its weight, the authors concluded that the predominant cause of the decrease in the catalytic activity of the cation exchange resin KU-2 is adsorption of the resinous particles on the catalytic surface. This conclusion was confirmed by the observed dependence of the rate of decrease in the catalytic activity of the resin on the initial raw material. It is noted that in the selection of the method of regenerating the catalyst, attention must be paid to the most complete possible liberation of the surface of the cation exchange resin from resinous particles.

Orig. art. has: 2 formulas, 1 table.

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L 59349-65
ACCESSION NR: AP5019336

ASSOCIATION: Institut goryuchikh iskopayemykh Goskomiteta po toplivnoy promyshlennosti pri Gosplane SSSR (Institute of Fuels, Committee on the Fuel Industry under Gosplan SSSR)

SUBMITTED: 21Apr64 ENCL: 00 SUB CODE: MT, GC

NR REF SOV: 006 OTHER: 000 JPRS

Card 3/3

TSVETKOV, O.N.; KORENEV, K.V.; DMITRIYEV, S.A.; KARAVAYEV, N.M.

Mechanism underlying the alkylation of phenols by higher olefins in the presence of cation-exchange resins. Dokl. AN SSSR 162 no.4: 833-835 Je '65. (MIRA 18:5)

1. Institut goryuchkikh iskopayemykh AN SSSR. 2.Chlen-korrespondent AN SSSR (for Karavayev).

DMITRIYEV, S.A., kand. tekhn. nauk; KORENEV, K.D.; TSVETKOV, O.N.

Synthesis of OP washing compounds from phenols extracted peat oils. Torf. prom. 38 no.6:24-28 '61. (MIRA 14:9)

1. AN SSSR (for Dmitriyev). 2. Kalininskiy torfyanoy institut (for Korenev, TSvetkov).
(Cleaning compounds) (Peat)

TSVETKOV, O.N.; KORENEV, K.D.; KARAVAYEV, N.M.; DMITRIYEV, S.A.

Certain problems involved in the use of the KU-2 cation-exchange resin in the process of alkylation of phenols by higher olefins. Dokl. AN SSSR 157 no.5:1171-1173 Ag '64.
(MIRA 17:9)

1. Institut goryuchikh iskopayemykh Gosudarstvennogo komiteta po toplivnoy promyshlennosti pri Gosplane SSSR. 2. Chlen-korrespondent AN SSSR (for Karavayev).

CA DMITRIYEVSKY

The microhardness tester PMT 2, its use for mineral investigation. S. I. Dmitriev. *Zapiski Vsesoyuz. Mineral. Obshchestva* (Mém. soc. Russe minéral.) **78**, 241–52 (1949); cf. Khrushchov and Berkovich, *Micro Hardness Measurement by Impression Tests*, 1943.—The micro hardness test which is also the principle of the Knoop and Hanemann tests is based on the fundamental formula $H = 2 \sin \alpha/2 \cdot P/d^2$, in which α is the angle between the faces of the diamond point (134° in Khrushchov's tester), P the load, d the diagonal length of the impression figure on the mineral face. Important details and tables are given for the general use of this test, for mineral investigation on polished sections, especially for ore minerals, including a general crit. comparison with the results of previous methods for hardness tests, and the shapes of the impressions, anisotropy effects, pressure figures, gliding phenomena, and crack-forming in brittle materials. W. Eitel

DMITRIEV, S. D.

"Anisotropy of micro-hardness and the micro-hardness of haloid compounds monovalent alkali metals"
pp. 193 of the monograph "Microhardness", Acad. Sci. U.S.S.R. 1951

DMITRIYEV, S. D.

USSR/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26526.

Author : Dmitriyev, S.D., Mayorov, A.N.
Inst : All-Union Scientific Research Institute of Geology.
Title : A Type of Granite Pegmatites of Central Kazakhstan.

Orig Pub : Inform. sb. Vses. n.-i. geol. in-t, 1956, No. 4, 78 - 85.

Abstract : No abstract.

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DMITRIYEV, S.D.

Texture of granite pegmatites in the Balkhash region and characteristics of their formation. Zap. Vses. min. ob-va 87 no.2:208-212 '58. (MIRA 11:9)

1. Deystvitel'nyy chlen Vsesoyuznogo mineralogicheskogo obshchestva.
(Balkhash region--Pegmatites)

3(8) SOV/20-123-6-41/50

AUTHOR: Dmitriyev, S. D.

TITLE: The Pegmatites of Central Kazakhstan (Pegmatity Tsentral'nogo Kazakhstana)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6, pp 1108-1111 (USSR)

ABSTRACT: In central Kazakhstan many pegmatites and their related quartz-feldspar formations are known (More than 10,000 types of pegmatites). Three types of economic worth are here known: a) ceramic; b) with piezo-optical minerals and c) with rare metals. The morphology as well as the inner structure of the pegmatites is complicated. A survey is given. The formations of the pegmatites in this region were of various kinds. This is seen from the adjoining classification (terminology by A. I. Ginzburg (Ref 3)). G e n e t i c c l a s s i f i c a t i o n . A. Epigenetic pegmatites. 1) Recrystallized dikes, stocks, "seamlike" bodies of fine-grained granite and granite-aplit. 2) Pneumato-hydrothermal-metasomatic, pneumatolitic-hydrothermal and hydrothermal formations. B. Syngenetic pegmatites. 1) Fragmental lensoid-pegmatites. S p a t i a l

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distribution. The pegmatites in the granitoid mountain stocks concentrate mostly in the apical parts. Relation to the granites. Pegmatites are usually in the middle of the granite, they are formed through recrystallization of the granite or originate from the same magma. Relation to the greisen and quartz-veins: The genetic relation is made clear by the intermediate types: quartz-feldspar-, quartz-greisen- and pegmatite-greisen bodies. Structure of the pegmatites. In the pegmatites and in the granites at the contacts with the pegmatite occur (Ref 5): In the granite: aplit, granite-porphyritic, leaching and crystallization limited structures; in the pegmatite: graphic, apographic, porphyroblastic (metacrystalline), pegmatoid and blockshaped; in the quartz-centre - a massive (grained) block-shaped, drusenformed and brodshaped. Apographic structures have many variations. Characteristic of cavities is mentioned in table 1. Form of the quartz-centre of the zonal pegmatites. It shows mostly the external contours of the pegmatite body.

 Origin temperature of the epigenet-

i c p e g m a t i t e s . 1) They were originated under lower temperatures than the pegmatites, at which the remainder melt could still exist. 2) These temperatures were similiar to those under which the quartz veins originated in this area. 3) The feldspar-quartz and quartz lenses and stocks, which are widely spread over this area could not originate from a hypothetic "Silexit"-melt (Ref 1). There are 2 tables and 5 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut (All-Union Scientific Geological Research Institute)

PRESENTED: July 16, 1958, by A. A. Polkanov, Academician

SUBMITTED: July 10, 1958